RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) de.ceted errors when processing the following computer readable form:

Application Serial Number: __10/068,664__

Source: __OIPE__

Date Processed by STIC: __10/31/02__

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
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2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY
FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 3.1 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
        http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm> , **EFS Submission User Manual** - ePAVE)
2. **U.S. Postal Service:** U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. **Hand Carry directly to:**
   U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
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Revised 01/29/2002

O IPE

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: 10/068,664

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1_____Wrapped Nucleics
Wrapped Aminos

The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."

2_____Invalid Line Length

The rules require that a line not exceed 72 characters in length. This includes white spaces.

3_____Misaligned Amino
Numbering

The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.

4_____Non-ASCII

The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.

5_____Variable Length

Sequence(s)____contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.

6_____PatentIn 2.0
"bug"

A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.

7_____Skipped Sequences
(OLD RULES)

Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i)   SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

8_____Skipped Sequences
(NEW RULES)

Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000

9_____Use of n's or Xaa's
(NEW RULES)

Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa; and which residue n or Xaa represents.

10__✓__Invalid <213>
Response

Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence

11_____Use of <220>

Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32)   (Sec. 1.823 of Sequence Rules)

12_____PatentIn 2.0
"bug"

Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13_____Misuse of n

n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

OIPE

Another error on p. 4

RAW SEQUENCE LISTING   DATE: 10/31/2002
PATENT APPLICATION: US/10/068,664   TIME: 15:58:50

Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF4\10312002\J068664.raw

```
    3 <110> APPLICANT: Li, Chuan
    5 <120> TITLE OF INVENTION: De novo synthesized plasmid, methods of making and use
thereof
    7 <130> FILE REFERENCE: ETI.PMMU.011502
    9 <140> CURRENT APPLICATION NUMBER: US 10/068,664
C--> 10 <141> CURRENT FILING DATE: 2002-10-15
   12 <160> NUMBER OF SEQ ID NOS: 41
   14 <170> SOFTWARE: PatentIn version 3.1
   16 <210> SEQ ID NO: 1
   17 <211> LENGTH: 44
   18 <212> TYPE: DNA
   19 <213> ORGANISM: synthetic oligo
   21 <400> SEQUENCE: 1
   22 cgcccgccgc ccgggcgccc cgccttccgc ttcctcgctc actg                44
   25 <210> SEQ ID NO: 2
   26 <211> LENGTH: 44
   27 <212> TYPE: DNA
   28 <213> ORGANISM: synthetic oligo
   30 <400> SEQUENCE: 2
   31 cgcccgccgc ccgggcgccc cgccaacgcg gaagtcagcg ccct                44
   34 <210> SEQ ID NO: 3
   35 <211> LENGTH: 44
   36 <212> TYPE: DNA
   37 <213> ORGANISM: synthetic oligo
   39 <400> SEQUENCE: 3
   40 cgcccgccgc ccgggcgccc cgccaacgca gaccgttccg tggc                44
   43 <210> SEQ ID NO: 4
   44 <211> LENGTH: 32
   45 <212> TYPE: DNA
   46 <213> ORGANISM: synthetic oligo
   48 <400> SEQUENCE: 4
   49 ccgccgcgcc gcttccactg agcgtcagac cc                              32
   52 <210> SEQ ID NO: 5
   53 <211> LENGTH: 32
   54 <212> TYPE: DNA
   55 <213> ORGANISM: synthetic oligo
   57 <400> SEQUENCE: 5
   58 gggcggcggg cgttcgggga aatgtgcgcg ga                              32
   61 <210> SEQ ID NO: 6
   62 <211> LENGTH: 32
   63 <212> TYPE: DNA
   64 <213> ORGANISM: synthetic oligo
   66 <400> SEQUENCE: 6
   67 gggcggcggg cgttgtcggg aagatgcgtg at                              32
```

— invalid response, see error summary sheet item 10 throughout

The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

RAW SEQUENCE LISTING   DATE: 10/31/2002
PATENT APPLICATION: US/10/068,664   TIME: 15:58:50

            Input Set : **A:\PTO.VSK.txt**
            Output Set: **N:\CRF4\10312002\J068664.raw**

```
 70 <210> SEQ ID NO: 7
 71 <211> LENGTH: 32
 72 <212> TYPE: DNA
 73 <213> ORGANISM: synthetic oligo
 75 <400> SEQUENCE: 7
 76 gggcggcggg cgttctcatg tttgacagct ta                      32
 79 <210> SEQ ID NO: 8
 80 <211> LENGTH: 32
 81 <212> TYPE: DNA
 82 <213> ORGANISM: synthetic oligo
 84 <400> SEQUENCE: 8
 85 gggcggcggg cgaagccact ggagcacctc aa                      32
 88 <210> SEQ ID NO: 9
 89 <211> LENGTH: 32
 90 <212> TYPE: DNA
 91 <213> ORGANISM: sythetic oligo
 93 <400> SEQUENCE: 9
 94 gcggcgcggc ggtacggggt ctgacgctca gt                      32
 97 <210> SEQ ID NO: 10
 98 <211> LENGTH: 32
 99 <212> TYPE: DNA
100 <213> ORGANISM: synthetic oligo
102 <400> SEQUENCE: 10
103 gcggcgcggc ggatcgcccc atcatccagc ca                      32
106 <210> SEQ ID NO: 11
107 <211> LENGTH: 32
108 <212> TYPE: DNA
109 <213> ORGANISM: sythetic oligo
111 <400> SEQUENCE: 11
112 gcggcgcggc ggttcacgtt cgctcgcgta tc                      32
115 <210> SEQ ID NO: 12
116 <211> LENGTH: 32
117 <212> TYPE: DNA
118 <213> ORGANISM: synthetic oligo
120 <400> SEQUENCE: 12
121 gcggcgcggc ggaagcacac ggtcacactg ct                      32
124 <210> SEQ ID NO: 13
125 <211> LENGTH: 32
126 <212> TYPE: DNA
127 <213> ORGANISM: synthetic oligo
129 <400> SEQUENCE: 13
130 ggcggggcgc ccaccatcga atggtgcaaa ac                      32
133 <210> SEQ ID NO: 14
134 <211> LENGTH: 44
135 <212> TYPE: DNA
136 <213> ORGANISM: synthetic oligo
138 <400> SEQUENCE: 14
139 cgcccgccgc ccgggccgcg cccgtgccta atgagtgagc taac          44
142 <210> SEQ ID NO: 15
```

```
RAW SEQUENCE LISTING              DATE: 10/31/2002
PATENT APPLICATION:  US/10/068,664   TIME: 15:58:50

        Input Set : A:\PTO.VSK.txt
        Output Set: N:\CRF4\10312002\J068664.raw
```

```
143 <211> LENGTH: 32
144 <212> TYPE: DNA
145 <213> ORGANISM: synthetic oligo
147 <400> SEQUENCE: 15
148 cgggcgcggc ccataaaagc ggcttcctga ca                          32
151 <210> SEQ ID NO: 16
152 <211> LENGTH: 39
153 <212> TYPE: DNA
154 <213> ORGANISM: synthetic oligo
156 <400> SEQUENCE: 16
157 gcaaaacaaa acggcctcct gtcaggaagc cgcttttat                    39
160 <210> SEQ ID NO: 17
161 <211> LENGTH: 44
162 <212> TYPE: DNA
163 <213> ORGANISM: synthetic oligo
165 <400> SEQUENCE: 17
166 ggaggccgtt ttgttttgct cgaaattaat acgactcact atag              44
169 <210> SEQ ID NO: 18
170 <211> LENGTH: 50
171 <212> TYPE: DNA
172 <213> ORGANISM: synthetic oligo
174 <400> SEQUENCE: 18
175 ggaattgtta tccgctcaca attccctata gtgagtcgta ttaatttcga        50
178 <210> SEQ ID NO: 19
179 <211> LENGTH: 42
180 <212> TYPE: DNA
181 <213> ORGANISM: synthetic oligo
183 <400> SEQUENCE: 19
184 ggaattgtga gcggataaca attcctaatt ttgtttaact tt                42
187 <210> SEQ ID NO: 20
188 <211> LENGTH: 34
189 <212> TYPE: DNA
190 <213> ORGANISM: synthetic oligo
192 <400> SEQUENCE: 20
193 atgtatatct ccttcttaaa gttaaacaaa atta                         34
196 <210> SEQ ID NO: 21
197 <211> LENGTH: 50
198 <212> TYPE: DNA
199 <213> ORGANISM: synthetic oligo
201 <400> SEQUENCE: 21
202 aagaaggaga tatacatatg aagcttcccg ggtaccggtc gactagttaa        50
205 <210> SEQ ID NO: 22
206 <211> LENGTH: 58
207 <212> TYPE: DNA
208 <213> ORGANISM: synthetic oligo
210 <400> SEQUENCE: 22
211 tagaggcccc aaggggttat gctagttaac tagtcgaccg gtacccggga agcttcat   58
214 <210> SEQ ID NO: 23
215 <211> LENGTH: 50
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RAW SEQUENCE LISTING   DATE: 10/31/2002
PATENT APPLICATION: US/10/068,664   TIME: 15:58:50

        Input Set : A:\PTO.VSK.txt
        Output Set: N:\CRF4\10312002\J068664.raw

```
    216 <212> TYPE: DNA
    217 <213> ORGANISM: synthetic oligo
    219 <400> SEQUENCE: 23
    220 ctagcataac cccttgggcc tctaaacggg gtcttgaggg gttttttgca        50
    223 <210> SEQ ID NO: 24
    224 <211> LENGTH: 37
    225 <212> TYPE: DNA
    226 <213> ORGANISM: synthetic oligo
    228 <400> SEQUENCE: 24
    229 cgcccgccgc cctgcaaaaa acccctcaag acccgtt                      37
    232 <210> SEQ ID NO: 25
    233 <211> LENGTH: 230
    234 <212> TYPE: DNA
C-->  235 <213> ORGANISM: artificial (DNA)
W-->  237 <220> FEATURE:
W-->  237 <223> OTHER INFORMATION:    — explanation required, see p. 6
W-->  237 <400> 25
    238 cgggcgcggc ccataaaagc ggcttcctga caggaggccg ttttgttttg ctcgaaatta   60
    240 atacgactca ctatagggaa ttgtgagcgg ataacaattc ctaattttgt ttaactttaa   120
    242 gaaggagata tacatatgaa gcttcccggg taccggtcga ctagttaact agcataaccc    180
    244 cttggggcct ctaaacgggt cttgaggggt ttttgcagg gcggcgggcg                 230
    247 <210> SEQ ID NO: 26
    248 <211> LENGTH: 32
    249 <212> TYPE: DNA
    250 <213> ORGANISM: synthetic oligo
    252 <400> SEQUENCE: 26
    253 ggcggggcgc ccttccccct tgaaggggcg aa                           32
    256 <210> SEQ ID NO: 27
    257 <211> LENGTH: 44
    258 <212> TYPE: DNA
    259 <213> ORGANISM: sythetic oligo
    261 <400> SEQUENCE: 27
    262 cgcccgccgc ccgggccgcg cccgatgagc tggacgcact cgcg             44
    265 <210> SEQ ID NO: 28
    266 <211> LENGTH: 35
    267 <212> TYPE: DNA
    268 <213> ORGANISM: synthetic oligo
    270 <400> SEQUENCE: 28
    271 gaaggagata tacatatgaa tattcgtcca ttgca                       35
    274 <210> SEQ ID NO: 29
    275 <211> LENGTH: 36
    276 <212> TYPE: DNA
    277 <213> ORGANISM: sytnetic oligo
    279 <400> SEQUENCE: 29
    280 ctagttaact agtcgattac atcatgccgc ccatgc                      36
    283 <210> SEQ ID NO: 30
    284 <211> LENGTH: 32
    285 <212> TYPE: DNA
    286 <213> ORGANISM: synthetic oligo
```

```
288 <400> SEQUENCE: 30
289 ggcggggcgc ccgcgggata tccggatata gt                              32
292 <210> SEQ ID NO: 31
293 <211> LENGTH: 32
294 <212> TYPE: DNA
295 <213> ORGANISM: synthetic oligo
297 <400> SEQUENCE: 31
298 cgcccgccgc ccggtgccta atgagtgagc ta                              32
301 <210> SEQ ID NO: 32
302 <211> LENGTH: 2701
303 <212> TYPE: DNA
304 <213> ORGANISM: artificial sequence
306 <220> FEATURE:
307 <223> OTHER INFORMATION: A de novo synthesized plasmid
309 <400> SEQUENCE: 32
310 ccgccgcgcc gcttccactg agcgtcagac cccgtagaaa agatcaaagg atcttcttga    60
312 gatccttttt ttctgcgcgt aatctgctgc ttgcaaacaa aaaaaccacc gctaccagcg   120
314 gtggtttgtt tgccggatca agagctacca actctttttc cgaaggtaac tggcttcagc   180
316 agagcgcaga taccaaatac tgtccttcta gtgtagccgt agttaggcca ccacttcaag   240
318 aactctgtag caccgcctac atacctcgct ctgctaatcc tgttaccagt ggctgctgcc   300
320 agtggcgata agtcgtgtct taccgggttg gactcaagac gatagttacc ggataaggcg   360
322 cagcggtcgg gctgaacggg gggttcgtgc acacagccca gcttggagcg aacgacctac   420
324 accgaactga gatacctaca gcgtgagcta tgagaaagcg ccacgcttcc cgaagggaga   480
326 aaggcggaca ggtatccggt aagcggcagg gtcggaacag gagagcgcac gagggagctt   540
328 ccaggggaa acgcctggta tctttatagt cctgtcgggt ttcgccacct ctgacttgag   600
330 cgtcgatttt tgtgatgctc gtcagggggg cggagcctat ggaaaaacgc cagcaacgcg   660
332 gcctttttac ggttcctggc cttttgctgg ccttttgctc acatgttctt tcctgcgtta   720
334 tcccctgatt ctgtggataa ccgtattacc gcctttgagt gagctgatac cgctcgccgc   780
336 agccgaacga ccgagcgcag cgagtcagtg agcgaggaag cggaagagcg cctgatgcgg   840
338 tattttctcc ttacgcatct gtgcggtatt tcacaccgca tatggtgcac tctcagtaca   900
340 atctgctctg atgccgcata gttaagccag tatacactcc gctatcgcta cgtgactggg   960
342 tcatggctgc gccccgacac ccgccaacac ccgctgacgc gccctgacgg gcttgtctgc  1020
344 tcccggcatc cgcttacaga caagctgtga ccgtctccgg gagctgcatg tgtcagaggt  1080
346 tttcaccgtc atcaccgaaa cgcgcgaggc agctgcggta aagctcatca gcgtggtcgt  1140
348 gaagcgattc acagatgtct gcctgttcat ccgcgtccag ctcgttgagt ttctccagaa  1200
350 gcgttaatgt ctggcttctg ataaagcggg ccatgttaag ggcggttttt tcctgtttgg  1260
352 tcactgatgc ctccgtgtaa gggggatttc tgttcatggg ggtaatgata ccgatgaaac  1320
354 gagagaggat gctcacgata cgggttactg atgatgaaca tgcccggtta ctggaacgtt  1380
356 gtgagggtaa acaactggcg gtatggatgc ggcgggacca gagaaaaatc actcagggtc  1440
358 aatgccagcg cttcgttaat acagatgtag gtgttccaca gggtagccag cagcatcctg  1500
360 cgatgcagat ccggaacata atggtgcagg cgctgactt ccgcgttggc ggggcgcccg  1560
362 ggcggcgggc gttcggggaa atgtgcgcgg aacccctatt tgtttatttt tctaaataca  1620
364 ttcaaatatg tatccgctca tgagacaata accctgataa atgcttcaat aatattgaaa  1680
366 aaggaagagt atgagtattc aacatttccg tgtcgccctt attcccttttt ttgcggcatt  1740
368 ttgccttcct gtttttgctc acccagaaac gctggtgaaa gtaaaagatg ctgaagatca  1800
370 gttgggtgca cgagtgggtt acatcgaact ggatctcaac agcggtaaga tccttgagag  1860
372 ttttcgcccc gaagaacgtt ttccaatgat gagcactttt aaagttctgc tatgtggcgc  1920
374 ggtattatcc cgtattgacg ccgggcaaga gcaactcggt cgccgcatac actattctca  1980
376 gaatgacttg gttgagtact caccagtcac agaaaagcat cttacggatg gcatgacagt  2040
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 10/31/2002
PATENT APPLICATION: US/10/068,664   TIME: 15:58:51

            Input Set : A:\PTO.VSK.txt
            Output Set: N:\CRF4\10312002\J068664.raw

Use of <220> Feature(NEW RULES):
Sequence(s)__are missing the <220> Feature and associated headings.
Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence"
or"Unknown". Please explain source of genetic material in <220> to <223>
section (See "Federal Register," 6/01/98, Vol. 63, No. 104,pp.29631-32)
(Sec.1.823 of new Rules)

Seq#:25,39

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/068,664

DATE: 10/31/2002
TIME: 15:58:51

Input Set : **A:\PTO.VSK.txt**
Output Set: **N:\CRF4\10312002\J068664.raw**

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:235 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:25
L:237 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:25, <213>
ORGANISM:Artificial Sequence
L:237 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:25, <213>
ORGANISM:Artificial Sequence
L:237 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:25,Line#:237
L:918 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:39
L:920 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:39, <213>
ORGANISM:Artificial Sequence
L:920 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:39, <213>
ORGANISM:Artificial Sequence
L:920 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:39,Line#:920